



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,647	10/11/2001	Thomas H. Wright	ASD-15; H6206 (51021 CON1	2560
27975 7590 04/10/2007 ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A. 1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE P.O. BOX 3791 ORLANDO, FL 32802-3791			EXAMINER CROSLAND, DONNIE L	
			ART UNIT	PAPER NUMBER
			2612	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/10/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/976,647

Applicant(s)

WRIGHT ET AL.

Examiner

DONNIE L. CROSLAND

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 59-75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 59-75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Specification

The amendment filed 5-10-06 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The inclusion of "wherein said flight data includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft" is new matter unsupported by the original disclosure.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 59-75 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim language "wherein said flight data includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft" is new matter unsupported by the original disclosure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2612

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 59, 62-70, and 75 rejected under 35 U.S.C. 103(a) as being unpatentable over Ross in view of Miller, Jr. (4729102), already of record.

Ross shows an aircraft data transmission system, the aircraft having a data acquisition unit 10 comprising a communication unit 24 located in the aircraft and in communication with the data acquisition unit 10; a cellular infrastructure (col. 4, lines 40-50) in communication with the communication unit 10 after the aircraft has landed, wherein the communication is initiated automatically upon landing of the aircraft; and a data reception unit 32 in communication with the cellular infrastructure, see col.5, lines 48 et seq., wherein after the aircraft has landed, a second switch 14 communicates with the controller 10; further in col. 6, lines 13-36, acquired aircraft data is automatically communicated to the flight center's controller 32 upon the aircraft being downed. The term downed equates to landing, also, see claims 12 and 13.

Art Unit: 2612

Accordingly, Ross clearly disclose the automatic activation of a second switch 14 associated with the landing or downing of the aircraft in which relevant acquired data is communicated through a cellular infrastructure to a ground base receiver, col. 5, lines 48-66.

With respect to claim 62, Ross discloses a modem, col. 6, and lines 48-51.

With respect to claim 63 an antenna is inherent in cellular infrastructures of Ross.

With respect to claim 64 the recited "router" is inherent in the cellular infrastructure of Ross are conventionally associated with cell infrastructures.

With respect to claim 69 recitation of a digital flight data acquisition unit, Ross discloses controller 10 can be a TI Travelmate 4000, col. 6, lines 37-40.

With respect to claim 67, receiver for data can be a mainframe, col. 5, and lines 1-4.

Claims 65, 68, and 69 are clearly met by Ross as discussed above.

Claim 75 is clearly met by Ross with respect to processors in both the aircraft and the ground station each processing information with respect to a computer readable medium as illustrated in the flow chart in figure 2.

Ross provides for a data storage medium having stored thereon flight data gathered in flight, the controller 10 being a Texas Instrument notebook computer, col. 6, lines 37-45. The controller 10 inherently has a memory for storage purposes.

Ross further suggests that in an alternate embodiment, the controller 10 communicates flight data such as altitude, air speed, and direction of the aircraft, the

Art Unit: 2612

downloading or transmission of the flight data being activated due to downing or impact of the aircraft col. 6, lines 13-36.

Accordingly, it is clearly realized from the teachings of Ross, the provision of a switch activated due to landing or the aircraft being down which transmits flight data such as altitude, air speed, and direction of the aircraft.

It should be noted that flight data (status) gathered in flight as well as flight plan data is communicated to a data reception unit.

Ross fails to suggest the specified flight data of "vertical acceleration".

Miller shows the aircraft data transmission system with a data storage medium in flight data recorder data acquisition circuitry 10, figure 1.

Miller further suggests the specific flight data that includes vertical acceleration, see col. 7, lines 44-68, col. 8, lines 1-24, col. 9, lines 1-16, col. 10, lines 29-68, col. 18, lines 30-56, col. 22, lines 3-11.

It would have been obvious to one having ordinary skill in the art to clearly provide a storage for in flight data and include a specific parameter such as vertical acceleration as part of the in flight data in the aircraft data transmission system of Ross because the use and advantages of a storage for in flight data which includes a specific parameter such as vertical acceleration as part of the in flight data in the aircraft data transmission system is clearly suggested by Miller, Jr.

Miller also provides for the automatic or manual operation of switches for the transmission of flight data, see col. 8, lines 5-24.

Art Unit: 2612

Claims 60 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross et al and Miller as applied in claims 59 and 70 further in view of Miller et al (5,652,717).

Miller shows in figure 2 the acquisition of data from an aircraft 14, col. 2, lines 34-45, and provides for a telecommunication network 22 and internet communication, col. 3, lines 4-18, 65 et seq.

Miller is relied upon to show that it is conventional to manipulate the data received from the aircraft 14 through an Internet connection 30.

Claims 60 and 71 only recite that the data reception unit is in communication with the cellular infrastructure via the Internet.

Cellular infrastructure is clearly as 24 in Ross et al.

The Internet connection 30 which is at the reception unit provides an Internet access as disclosed by Miller

Accordingly, it would have been obvious to one having ordinary skill in the art to provide an internet connection for communication purposes in a reception unit because the specific use of providing an internet connection for communication purposes in an reception unit concerned with aircraft data acquisition and transmission is clearly suggested by Miller, see col. 3, lines 25-44, and specifically lines 40-44, for interactive internet support.

Claims 61 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross et al and Miller as applied in claims 59 and 70 further in view of Bannister

Bannister shows a data acquisition system and provides for conventional PSTN interfaced with the Internet, see figure 1 and related disclosure.

Accordingly, Bannister teaches the artisan the combined use of PSTN AND INTERNET.

Accordingly, at the time the invention was made, the combined use of cellular communication, Internet access, and PSTN are all well known and conventional as evidenced by the teachings of the references as discussed above.

Patentable invention is not involved in employing Internet connection through the cellular phone system such as conventional (PSTN), see Bannister.

Claims 73 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross et al in view of Miller, Jr. further in view of Polivka et al.

Polivka shows in an aircraft data acquisition and transmission means as shown in figure 3a and 3b, and provides for the acquisition of data such as a video camera 327 in figure 3a, compressing (323, figure 3a), encrypting (such as forward error correction encoder unit 330, figure 3b), segmenting and constructing packets of data from the segmented flight data (PSK/SPREAD spectrum modulator 361 in figure 3b), see col. 10, lines 13 et seq.

Art Unit: 2612

With respect to claim 74, the acknowledgement of receipt of the transmitted data is no more than the response due to the video teleconference as provided for in Polivka, col. 10, such is no more than conventional bi-directional communication and would not involve patentable invention.

It would have been obvious to one having ordinary skill in the art to process the flight data of Ross as modified by Miller Jr. in the aircraft data transmission system in a manner as suggested by Polivka in an aircraft data transmission system.

Any advantages seen are those naturally expected due to the specified processing of Polivka.

Response to Arguments

Applicant's arguments filed 5-10-06 have been fully considered but they are not persuasive. Applicants argue that in view of FAA section 121.343, the disclosed and claimed flight data "inherently" includes time, airspeed, altitude, vertical acceleration, and heading data.

Applicants' further state that "other data" are also recorded as set forth in the regulation.

The examiner contends that the flight data with respect to time, airspeed, altitude, vertical acceleration, and heading data are specific data that is transmitted.

Other data may be monitored, however, it is submitted that among the other data monitored, only the data that includes time, airspeed, altitude, vertical acceleration, and heading data is transmitted or communicated to a data reception unit.

Art Unit: 2612

This is the specific language that these claims are limited to.

A review of applicants' disclosure lacks mention of this specific data for storage as well as transmission.

It is submitted that even though the FAA requirement for the monitoring of data specified by the rule, there is no rule governing the transmission of the specific monitored data as represented in the claims.

Accordingly, applicants' disclosure fails to set forth the specific flight data in the form time, airspeed, altitude, vertical acceleration, and heading data as well as the communication of such specific flight data to a data reception unit.

Reexamination 90/006,742 has been reviewed. It is noted that the prior art document to Miller, Jr. (4,729,102) was not considered in the reexamination proceedings and therefor was not considered with respect to the patentability of the reexamination claims.

The examiner considers the teachings of Miller, Jr. pertinent with respect to the examination of the claims at issue as indicated above.

Applicant's arguments presented 1-24-07 are noted.

Applicant cannot import data from one document such as the 717 document submitted as exhibit 1 into the specification of the patent application. Such data must be present as originally filed.

This document does not cure the defect.

It does not matter if regulations with respect to parameters are required under FAA guideline section 121.343.

Such regulations with respect to governing parameters must be present in the original disclosure.

There is no mention in the original disclosure as to the questioned matter as referenced above.

The incorporation of such into the specification as well as the claims is new matter.

Applicant further argues that Ross fails to transmit data after the aircraft has landed.

It is submitted that Ross clearly provide for the transmission of information in response to switch 14 being closed upon landing, see col. 5, lines 48-66.

Ross further states that data or information other than flight cancellation data is transmitted, for instance aircraft status data, see col. 6, lines 64-68.

The status data would include flight parameter data or data acquired by controller 10, for instance altitude, air speed, and direction of the aircraft, col. 6, lines 13-22.

Miller with respect to claim 59 is relied upon to show the conventionality of a flight parameter such as vertical acceleration.

The skilled artisan would find it to be a matter of routine to include a flight parameter such as vertical acceleration as part of the status data in Ross because of the conventionality of such as suggested by Miller.

Conventional flight status data are within the meaning of status data as disclosed by Ross.

The examiner contends that the status data of Ross is gathered and stored during flight.

Conclusion

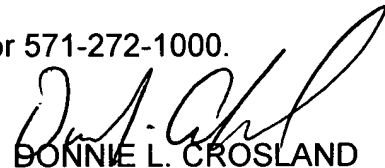
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DONNIE L. CROSLAND whose telephone number is 571-272-2980. The examiner can normally be reached on Mon-Thur. 9:30a-6:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL HORABIK can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


DONNIE L. CROSLAND
Primary Examiner
Art Unit 2612

DLC 
4-13-07